

REMARKS

**I. Introduction**

In response to the Office Action dated December 14, 2006, Applicants have amended claims 5-16, canceled claims 17 and 18, and added new claims 19 and 20. Care has been taken to avoid the introduction of new matter. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

**II. Claim Rejections Under 35 U.S.C. § 101**

Claims 5 – 13 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicants traverse these rejections as follows.

Regarding claims 5 – 10, the Examiner asserts that claims recite only software per se and are thus non-statutory. Applicants respectfully disagree. Independent claims 5 and 8 each recite “a computer-readable instruction converting apparatus having instructions stored thereon for optimizing an instruction program,” and are either articles of manufacture or machines (or both), which are statutorily recognized categories of patentable inventions under 35 U.S.C. § 101. It is well known in the art that a computer-readable medium may be manufactured to include instructions that instruct a computer to perform various operations. An example is a CD-ROM with installed software instructions. Such a computer-readable medium is an article of manufacture, which is one of the statutorily recognized categories of patentable inventions. In addition, a computer-readable medium may also be a machine. For example, the CD-ROM with installed software instructions is also a machine having multiple layers of components that operate together to store digital information. Such a machine is also one of the statutorily

recognized categories of patentable inventions. For at least these reasons, Applicants submit that claims 5 and 8 are directed to an invention having patentable subject matter.

Regarding claims 5 – 7, the Examiner also asserts that it is unclear what the recitation “applying an instruction” is intended to define. Applicants have amended claim 5 to more particularly recite that the power control instruction applier inserts or replaces an instruction related to a power control operation.

Independent claims 11 and 14 are directed to a computer implemented instruction converting method for optimizing an instruction program so as to suitably execute the optimized instruction program by a predetermined microprocessor. A "process" is one of the statutorily defined categories of inventions that clearly constitute patentable subject matter. 35 U.S.C. § 101 states that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented. As a method claim, claims 11 and 14 fall squarely within the category of "process" inventions. Thus as an initial matter, claims 11 and 14 must be recognized as being part of a category of patentable inventions under § 101.

Claims 11 and 14 also do not belong to any of the judicially created exceptions to patentable subject matter -- i.e., abstract ideas, laws of nature, and natural phenomenon. Rather, claims 11 and 14 define a computer-implemented method which optimizes an instruction program that is executable by a processor. Clearly the optimized instruction program executed by the predetermined microprocessor provides a useful, concrete, and tangible result. For at least these reasons, Applicants submit that claims 11 and 14 are directed to an invention having patentable subject matter.

All claims dependent upon the above-described claims are directed to statutory subject matter for at least the same reasons described above. Accordingly, withdrawal of these rejections is respectfully solicited.

**III. Claim Rejections Under 35 U.S.C. § 112**

Claims 5 – 18 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Regarding claim 5, Applicants have amended the recitation “applies an instruction” to read “inserts or replaces an instruction.” Claim 11 has been similarly amended.

Regarding claim 7, Applicants have amended the recitation “instruction-independent operation” to recite “instruction-wise operation.” Claim 13 has been similarly amended.

Claims 8 – 10 and 14 – 16 have been amended to make clear the instruction section is intended to represent the instruction section detected during power control analysis.

Claims 10 and 16 have also been amended to replace “a replaceable instruction” with “another instruction.”

Applicants have canceled claims 17 and 18. Accordingly, as all rejections under § 112 have been addressed, withdrawal of these rejections is respectfully requested.

**IV. Double Patenting Rejections**

Claims 5, 6, 11, and 12 stand rejected on the grounds of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 7 and 10 of U.S. Patent Application No. 10/342,349. Applicants traverse these rejections as follows.

Claims 5, 6, 11, and 12 each include the feature of extracting power control management information by referring to a comment sentence which is written in the instruction program and is not executed by the predetermined microprocessor. This feature is not recited nor suggested by claims 7 or 10 of the '349 application. Accordingly, claims 5, 6, 11, and 12 are not obvious over claims 7 and 10 of the '349 application. Withdrawal of these rejections is respectfully requested.

**V. Claim Rejections Under 35 U.S.C. §§ 102 and 103**

Claims 5, 7, 11, and 13 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,790,877 to Nishiyama. Claims 6, 8, 9, 12, 14, and 15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nishiyama in view of U.S. Patent No. 5,453,401 to Lin. Applicants traverse these rejections for at least the following reasons.

**Independent Claims 5 and 11**

Claim 5 recites, among other things, a power control manager, which extracts power control management information by referring to a comment sentence which is written in the instruction program and is not executed by the predetermined microprocessor. Similarly, claim

11 recites a power control managing step for extracting power control management information by referring to a comment sentence which is written in the instruction program and is not executed by the predetermined microprocessor. At least these features are not disclosed by Nishiyama.

As depicted in Figure 10 of the pending application and described in paragraph [0095] of the application as published, an instruction program includes comment statements which indicate the beginning and end of a power control information section of the instruction program. As described in paragraphs [0097] – [0098], a power control information managing means extracts the comment statement and determines whether the statement indicates that power control operation is to be turned on or off. The power control information managing means instructs a power control information detecting means to detect an operation resource whose power can be controlled.

Nishiyama, by contrast, fails to disclose the use of comment statements for extracting power control management information. The Examiner equates the resource utilization table generation unit 501 of Nishiyama with the power control manager recited in claim 5. However, resource utilization table generation unit 501 selects executable instructions in an instruction program for processing. Nishiyama does not disclose or even suggest using comment statements which are not executed by a microprocessor to extract power control information.

Accordingly, as anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference, *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir.

1983), and Nishiyami fails to disclose at least the above described elements, it is clear Nishiyami does not anticipate claims 5 and 11.

Independent Claims 8 and 14

Independent claim 8 recites, among other things, an instruction reassembling unit, which reassembles the instruction program in such a manner that the instruction section detected during power control analysis is made long, during which an actuation of an operation resource can be stopped. Similarly, claim 14 recites an instruction reassembling step for reassembling the instruction program in such a manner that the instruction section detected during power control analysis is made long, during which an actuation of an operation resource can be stopped. At least these features are not disclosed or suggested by Nishiyami nor Lin, alone or in combination with each other.

The Examiner correctly acknowledges that Nishiyami fails to disclose reassembling the instruction program, and relies on Lin to overcome this deficiency. Lin does appear to disclose changing the order of instructions to maximize the reduction effect on consumption power. However, Lin does not disclose or suggest how the instructions are reordered. As such, Lin does not disclose or suggest making the instruction section detected during power control analysis long.

Accordingly, as each and every limitation must be disclosed or suggested by the prior art references in order to establish a *prima facie* case of obviousness (MPEP § 2143.03), and the combination of the cited references fails to do so, it is respectfully submitted that claims 8 and 14 are patentable over the cited references taken alone or in combination with one another.

Dependent Claims 6, 7, 9, 10, 12, 13, 15, 16, 19, and 20

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Harness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as the independent claims are patentable for at least the reasons set forth above, it is respectfully submitted that all dependent claims are also in condition for allowance. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

**VI. Conclusion**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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